

112624-00080 Utility.ST25
SEQUENCE LISTING

<110> Arizona Board of Regents, on behalf of Arizona State University

<120> COMPOSITION AND METHOD FOR ENHANCING IMMUNE RESPONSE

<130> 112624.00080

<150> PCT/US03/07073

<151> 2003-03-06

<150> 60/362,247

<151> 2002-03-06

<160> 9

<170> PatentIn version 3.2

<210> 1

<211> 35

<212> PRT

<213> Human immunodeficiency virus type 1

<220>

<221> PEPTIDE

<222> (1)..(35)

<223> HIV-1 gp41 peptide portion (residues 650-685)

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Ser Gln Thr Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp
1 5 10 15

Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu Trp
20 25 30

Tyr Ile Lys
35

<210> 2

<211> 6

<212> PRT

<213> Human immunodeficiency virus type 1

<220>

<221> PEPTIDE

<222> (1)..(6)

<223> HIV-1 gp41 peptide portion (residues 663-668)

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Glu Leu Asp Lys Trp Ala
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<210> 3
 <211> 36
 <212> PRT
 <213> Human immunodeficiency virus type 1

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Cys Ser Gln Thr Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu
 1 5 10 15

Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu
 20 25 30

Trp Tyr Ile Lys
 35

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 <223> HIV-1 isolate MN clone v5 (residues 649-685)

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Ser Gln Thr Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Gly Leu Asp
 1 5 10 15

Lys Trp Glu Ser Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu Trp
 20 25 30

Tyr Ile Lys Ile
 35

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<400> 5

112624-00080 Utility.ST25

Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu Asp
1 5 10 15

Lys Trp Ala Gly Leu Trp Asn Trp Phe Glu Ile Thr Asn Trp Leu Trp
20 25 30

Tyr Ile Lys Ile
35

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<212> PRT
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Ser Gln Asn Gln Gln Glu Lys Asn Glu His Glu Leu Leu Glu Leu Asp
1 5 10 15

Lys Trp Ala Asn Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu Trp
20 25 30

Tyr Ile Lys Ile
35

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Ser Gln Asn Gln Gln Glu Lys Asn Glu Gln Asp Leu Leu Glu Leu Asp
1 5 10 15

Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile Ser Asn Trp Leu Trp
20 25 30

Tyr Ile Lys Ile

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 <212> DNA
 <213> Artificial Sequence

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 acaaccctca atgacaagat ctttagctac accgagagcc ttgctggcaa gagggagatg 180
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 cattagcatg gcaaattggtc ctggaccttc ccaaacccaa caagagaaga atgagcaaga 420
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<400> 9

Met Ala Ile Lys Leu Lys Phe Gly Val Phe Phe Thr Val Leu Leu Ser
 1 5 10 15

Ser Ala Trp Ala His Gly Thr Pro Gln Asn Ile Thr Asp Leu Cys Ala
 20 25 30

Glu Tyr His Asn Thr Gln Ile His Thr Leu Asn Asp Lys Ile Phe Ser
 35 40 45

Tyr Thr Glu Ser Leu Ala Gly Lys Arg Glu Met Ala Ile Ile Thr Phe
 50 55 60

Lys Asn Gly Ala Thr Phe Gln Val Glu Val Pro Gly Ser Gln His Ile
 65 70 75 80

112624-00080 Utility.ST25

Asp Ser Gln Lys Lys Ala Ile Glu Arg Met Lys Asp Thr Leu Arg Ile
85 90 95

Ala Thr Leu Thr Glu Ala Lys Val Glu Lys Leu Cys Val Trp Asn Asn
100 105 110

Lys Thr Pro His Ala Ile Ala Ala Ile Ser Met Ala Asn Gly Pro Gly
115 120 125

Pro Ser Gln Thr Gln Gln Glu Lys Asn Glu Gln Glu Leu Leu Glu Leu
130 135 140

Asp Lys Trp Ala Ser Leu Trp Asn Trp Phe Asp Ile Thr Asn Trp Leu
145 150 155 160

Trp Tyr Ile Lys Ile Ser Glu Lys Asp Glu Leu
165 170